Conference Recommendations

The discussion sessions developed many specific recommendations to help physics benefit fully from the ideas and efforts of talented women of all races throughout the world. Many of the recommendations combine ideas from two or more of the discussion sessions. The recommendations will not all be applicable to all countries or situations. They should be reviewed, and the applicable ones should be translated and adapted for dissemination and implementation in each country.

The challenge of increasing the participation of women and girls of all races and ethnicities in physics and related fields requires the commitment and engagement of women and men alike. Conference participants, IUPAP Liaison Committee members, and readers of these Proceedings have a responsibility to take action. We urge the IUPAP Liaison Committees and the Physical Societies in each country to disseminate these recommendations and advocate, implement, and monitor actions to recruit, retain, and advance more women in physics at all levels. Experience around the world has shown that actions that improve physics for women also benefit men. More detail on the recommendations, including examples of model programs in various countries, is provided in the Discussion Summaries in these Proceedings.

FOR IUPAP LIAISONS AND PHYSICAL SOCIETIES

- 1. Ensure that your country has an active Working Group (or Committee) on Women in Physics. If not, create one, and support the implementation of its recommendations. For some countries with few physicists, a Working Group on Women in Science would be appropriate instead.
- 2. Advocate and become involved in developing and implementing excellent, gender-inclusive science teaching, curricula, and educational materials for primary and secondary schools. Encourage physicists to partner with educators to find or create age-appropriate, gender-inclusive, hands-on physics experiments that students can do in primary and secondary schools. Offer girls opportunities to do physics research starting in secondary school.
- 3. Sponsor the translation and, if necessary, licensing, of effective gender-inclusive pedagogical materials from the Internet and other sources for use with your country's students in your native language(s).
- 4. Educate the general public about the positive impact of physics on daily life and the variety of physics careers that serve society. Feature female physicists as visible role models in textbooks and the media, and ensure they are considered for prizes and awards.
- 5. Encourage universities to make their physics programs more interdisciplinary, by offering courses, seminars, research projects, and degrees that join physics with other disciplines, such as biology, medicine, chemistry, computing, and engineering.
- 6. Organize and make available to members and students professional-development workshops on gender-sensitive mentoring, success skills, and leadership. Ensure women have access to effective mentoring.
- 7. Champion working environments that operate transparently, value and respect women, treat them equitably with men, and are "family friendly." "Family-friendly" workplaces have, for example, accessible child care, provisions for paid parental leave, position or fellowship end-date extensions for expectant and new mothers, methods to help both members of a dual-career couple find suitable positions, assistance for people returning after a career break, and flexible work schedules, even for employees in temporary positions (like graduate students and postdocs).
- 8. Facilitate and support networking among women physicists at the local, national, and international level. This support is especially critical in countries where women physicists are few and far between.
- 9. Ensure that physics-related conferences include women on the organizing committee and as invited speakers. Arrange for affordable, quality child care to be accessible to conference participants.
- 10. Advocate with the government and public and private funding agencies to make fellowships available to physicists seeking to return to science after a lengthy career break.
- 11. Assist with international surveys and national studies related to the status of women in physics, solutions for the dual-career problem, and other topics important to the profession. Obtain, monitor, and regularly report national and institution-by-institution gender-disaggregated statistics on education, hiring, awards, professional-society committee membership, and conference participation in physics.

FOR THE IUPAP WORKING GROUP ON WOMEN IN PHYSICS

- 12. Expand its website to provide in addition to networking and news an international hub for gender-related database information collected by the national working groups on women in physics, along with information and links on international best practices related to attracting, retaining, and advancing women in physics (such as outreach targeting girls, curricula, mentoring, networking, awards and fellowships, family-friendly practices, solutions to the dual-career problem, and site visits to study and improve institutional climate).
- 13. Support women physicists worldwide by designing a suite of one-day professional-development workshops tailored to physics and suitable for offering at any major physics or physics-education conference.
- 14. Establish an international network relationship with national and regional Women in Physics organizations, science-teachers' associations, national and international networks for women in science and engineering, and organizations working to advance the role of women in society at large.
- 15. Encourage continuing research in partnership with social scientists to quantify and understand the causes and effects of regional differences in the percentage of women in physics at all levels.
- 16. Conduct a thorough international survey of the status of women in physics to compare with the survey reported at the First Conference (Paris, 2002), and report the results by 2008.

FOR WOMEN AND MEN IN PHYSICS

- 17. Translate, disseminate, and take action to implement the resolutions and recommendations of this Conference. Report to the IUPAP Working Group on Women in Physics on the results.
- 18. Network, network, network.
- 19. Support and encourage girls and women in physics and promote their visibility.
- 20. Challenge negative and counterproductive attitudes and behavior that degrade the climate for women.
- 21. Find one or more mentors for yourself and become a supportive mentor for others.
- 22. Take credit for your achievements. Be a good collaborator, but don't let others steal your ideas and results.
- 23. Volunteer to help the Physical Society in your country or region implement the recommendations, above.
- 24. Identify best practices that should be shared internationally, and bring them to the attention of the IUPAP Working Group on Women in Physics for posting on its website.
- 25. Prior to the year 2008, individuals and country working groups should arrange for the collection, analysis, and reporting of data related to the participation and advancement of women and the actions taken to improve the status of women in physics. The results will be presented at the Third IUPAP International Conference on Women in Physics and reported at the IUPAP General Assembly in 2008.